

In re Patent Application of:
CHAI
Serial No. 10/754,238
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In the Specification:

On page 6, please replace the paragraph [0015] with the following rewritten paragraph:

Even though the crystals grown in this method are colorless and transparent, Applicant theorizes without wishing to be bound thereto that there is some evidence that oxide crystals produced at such high temperatures under a low oxygen condition tension can generate oxygen vacancy point defect centers. These ~~points~~ point defect centers could act as recombination centers which take away the radiative energy from an otherwise normal electron-hole recombination process. Even though such oxygen point defect centers are well known, they have not been implicated directly as the possible cause for low light yield in scintillating crystals.

On page 7, please replace the paragraph [0020] with the following rewritten paragraph:

This and other objects, features and advantages in accordance with the present invention are provided by a method comprising diffusing oxygen into a body of monocrystalline LSO by heating the body for a period of time in an ambient containing oxygen. The diffusing may be carried out so that the body of monocrystalline LSO is fully oxygenated, for example. In addition, the diffusing may be carried out so that the cerium is not further oxidized to a 4+ state. If a sufficient amount of cerium is oxidized the monocrystalline body may appear yellow in color, and, moreover, the performance may be adversely affected.